

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of all claims in the application.

**Listing of Claims**

1-17. (canceled)

18. (currently amended) A composition comprising:

- a) a substrate comprising an array of working electrodes, wherein each electrode comprises a first binding ligand;
- b) a plurality of colloids, each comprising:
  - i) a second binding ligand; and
  - ii) an electron transfer moiety, and
- c) a detector capable of detecting a voltage associated with electron transfer from said electron transfer moiety.

19. (canceled)

20. (previously presented) The composition of claim 18 wherein said plurality of colloids further comprise a self-assembled monolayer.

21. (previously presented) The composition of claim 20 wherein said self-assembling monolayer comprises an alkyl chain.

22. (previously presented) The composition of claim 18 wherein said substrate is a printed circuit board.

23. (previously presented) The composition according to claim 18 wherein said electrodes are gold.

24. (previously presented) The composition according to claim 18 wherein said electron transfer moiety is a transition metal complex.

25. (previously presented) The composition according to claim 24 wherein said transition metal complex is ferrocene.

26. (withdrawn) The composition according to claim 18 wherein said ETM is an organic ETM.

27. (previously presented) The composition according to claim 18 wherein said first binding ligand is a first nucleic acid and said second binding ligand is a second nucleic acid.